













City of Flagstaff August 2017



## Prepared by

## **City of Flagstaff**

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### Appendix A | Survey form

## 1 Introduction

This report summarizes the results of a community survey of users of the Flagstaff Urban Trails System (FUTS) conducted in June of 2017 by the City of Flagstaff.

A survey of FUTS trail users was undertaken for a number of reasons:

- Determine patterns of trail use, such as frequency and duration of activity, when trails are used, primary activities on the trails, purpose for using them, commute patterns, and which trails are most heavily used.
- Solicit user's perceptions of the FUTS system regarding maintenance, safety and security, and cleanliness; and identify specific concerns and problem spots.
- Learn what trail users like about the FUTS system, and what needs improvement
- Identify specific locations where new trails are needed, and where improvements and enhancements are needed for existing trails.
- Collect basic demographic information on trail users, including age, gender, and residence.
- Compare the results to the FUTS trail users survey conducted in 2011 to track changes over time.

#### Subject

The focus of this survey is trails that are part of the Flagstaff Urban Trails System (FUTS). These trails are typically 8 to 10 feet in width, surfaced in concrete, asphalt, or compacted aggregate, located within city limits, and maintained and operated by the City of Flagstaff.

Respondents were specifically asked not to address single-track trails in the survey. These are typically 1 to 2 feet in width, dirt-surfaced, and located outside the city in the National Forest or on other public lands.

#### Sample

This survey uses a purposive sampling methodology, which targets a subset of the population for a specific need or purpose. In this case, the survey specifically targeted member of the community who use FUTS trails. Consequently, the results of the survey represent the views and behavior of FUTS trail users.

### **Survey form**

The survey was hosted on the City of Flagstaff's website as part of the Flagstaff Community Forum, a service designed to facilitate public engagement, typically though a variety of citizen surveys on various topics. The survey was administered entirely in an online format; no paper copies of the survey were distributed or collected.

A reproduction of the survey form is included as Appendix A to this report, beginning on page 47.

The survey is divided into five distinct sections:

- The first section includes four questions to collect basic demographic information age, gender, and residence about survey respondents.
- The second section asks a series of 11 questions about FUTS trail use.
- The third section queries users' perceptions regarding maintenance, safety and security, and cleanliness; and asks respondents to submit concerns and identify problem spots.
- For the fourth section, users were asked to place points on a map to indicate where they think new trails should be built and where improvements and enhancements are needed on existing trails.
- Two broad, open-ended questions comprise the fifth section: what should be done to improve the FUTS, and what do you like about FUTS. A third open-ended catch-all question provided space for respondents to express any thoughts that had not been captured in the other questions

When possible, the survey questions were structured or worded to match the questions asked in the 2011 survey, to allow a direct comparison between the two surveys.

#### Promotion

The survey was promoted in a number of ways, mostly through electronic mediums:

- Information about the survey and a link were included on the FUTS page on the City of Flagstaff website: www.flagstaff.az.gov/futs
- Emails were sent to subscribers of the Bicycle Advisory Committee, Pedestrian Advisory Committee, and FUTS groups on the "Notify Me" function on the City of Flagstaff website. These groups comprise about 900 emails total.

- Several posts were made to the FUTS Facebook page (https://www.face-book.com/Flagstaff-Urban-Trails-System-207094295408/) which at the time of the survey had about 2500 followers. A boosted post on June 5 reached just under 4,000 Facebook users in the Flagstaff area.
- Several other organizations, including Flagstaff Biking Organization and Friends of Flagstaff's Future, helped to promote the survey through email and social media postings.

### Response

The survey was open for just over a month, from May 24 through June 30, 2017. A total of 375 completed surveys were submitted. The response represents a significant increase in participation over the 2011 survey, which received 220 responses.

#### How will survey results be used

Information gathered from the survey will be incorporated into an update of the FUTS master plan, which is a component of the City of Flagstaff's *Active Transportation Master Plan* effort.

Information from the survey is also invaluable to the City of Flagstaff in a general sense to improve future planning, design, operation, and maintenance of FUTS trails.

## 2 Summary of results

#### Introduction

- The City of Flagstaff conducted this survey of FUTS trail users to collect information about who uses the trails, how the trails are used, how users perceive the trails, what users like about the trails, and how the system can be improved.
- The survey was available on the Flagstaff Community Forum on the City of Flagstaff website through the month of June 2017. A total of 375 completed surveys were submitted.
- The survey repeats a previous survey of FUTS trail uses conducted in 2011.

#### Respondent profile

- A significantly higher percentage of survey respondents are female than male. This result is not in keeping with the gender split of the general population of Flagstaff, or respondents to the 2011 survey, both of which are more evenly split.
- Survey respondents tend to be much older than the general population of Flagstaff. Survey respondents in the age 18 to 29 category are considerably under-represented compared to the general population of Flagstaff, and the median age of 47 for survey respondents is much older than the median age of 27 for the community.
- While the age characteristics for survey respondents is at variance with that
  of the Flagstaff population, it does very closely match the results of the 2011
  survey.
- In terms of where survey respondents live, the Flagstaff districts that are most heavily represented are the Northwest, Central North, South, and East.

#### **FUTS** trail use

- Survey respondents are frequent and regular FUTS trail users. Four in five survey respondents use the trails at least one time per week. Only four respondents report that they never use FUTS trails
- Almost 60 percent of respondents are on the trails for between 30 minutes and hour during a typical visit.
- FUTS trails are used during the workweek slightly more than on weekends.

- Mornings are the most popular time to be on the trails, followed by afternoons and then evenings. Nighttime use of trails is fairly light.
- Spring, summer, and fall seasons all see consistent and heavy trail use. Trail use drops off in the winter, although more than half of respondents indicate that they continue to use FUTS trails during winter months.
- Primary activities on FUTS include walking or hiking with more than three
  -quarters of respondents and bicycling with about two-thirds of respondents. A little more than a third of respondents use the FUTS to jog or run.
- The most-frequently cited purposes for using FUTS trails include recreation and relaxation; health, exercise and fitness; and experiencing nature and open space.
- About half of respondents use FUTS trail for commuting and transportation.
- Most users walk, jog, or bicycle to access FUTS trails. Only a quarter of respondents drive a vehicle to get to the FUTS.
- For a third of the respondents who use the trails for commuting, more than half of their typical commute is on FUTS trails.
- The most frequently used trails include the Sinclair Wash Trail, Karen Cooper Trail, Arizona Trail, Mars Hill Trail, Nate Avery Trail, and NAU Trail.

#### **Respondents ratings of FUTS trails**

- Respondents were asked to rate the FUTS system as excellent, good, fair, or poor in the regard to maintenance, safety and security, and cleanliness.
- Respondents' ratings of FUTS are generally favorable, with more than 90 percent of respondents rating the trails as "excellent" or "good" for all three topics.
- The most pressing maintenance issues are surface conditions and drainage/ erosion problems.
- Transients on the trail is the most notable safety and security concern for trail users.
- Cleanliness problems include trash/litter and pet waste.
- The Route 66 Trail was cited most often by respondents as the location of problems for all three topics: maintenance, safety and security, and cleanliness.

 Overall, respondents' ratings of the trails dropped slightly for all three topics between the 2011 and 2017 surveys.

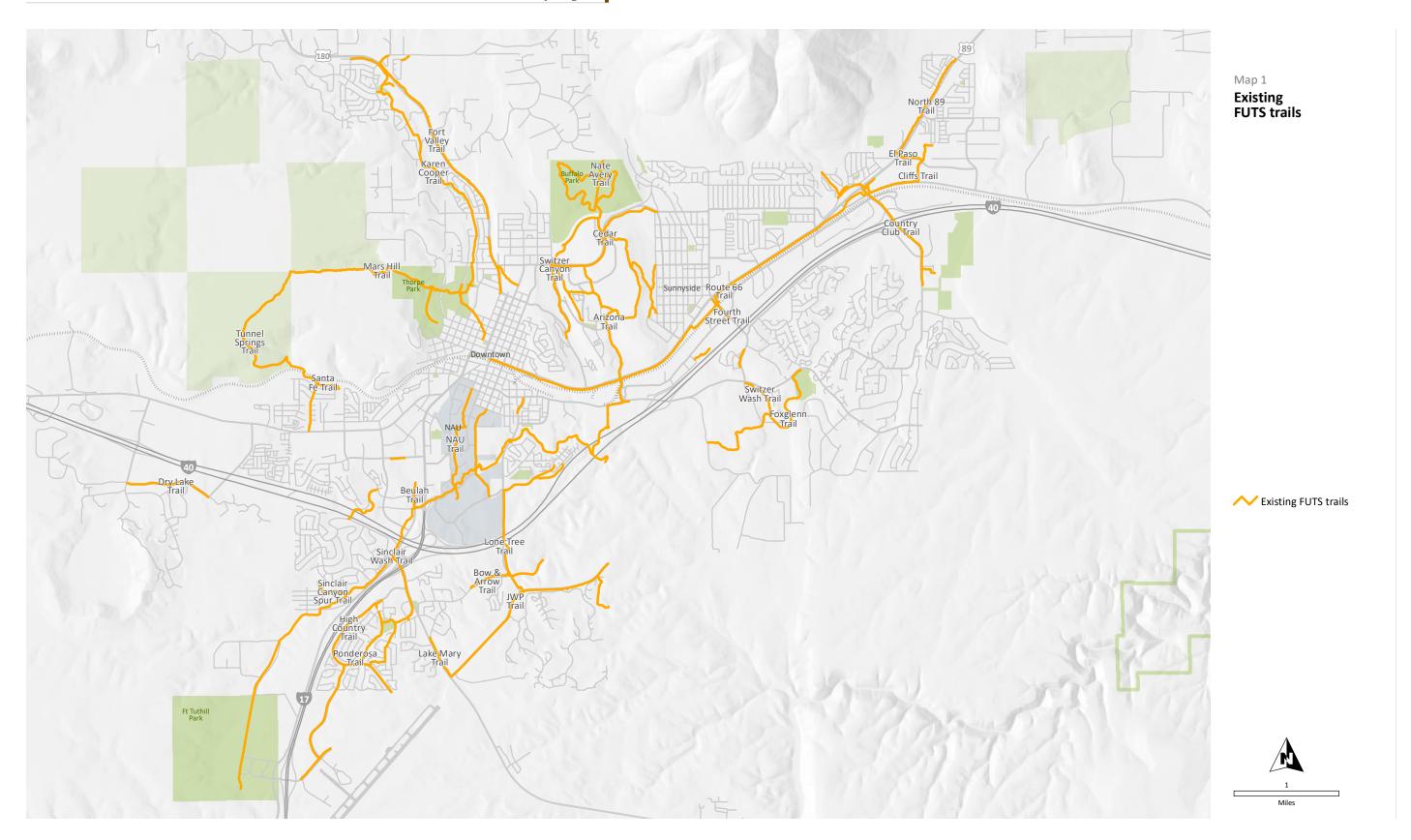
### What's good and what could be improved

- Survey takers were asked to respond to two open-ended questions: what do you like about the FUTS, and what should be done to improve the FUTS.
- In response to the question "what do you like about the FUTS," respondents most frequently listed the following attributes:
  - Avoids traffic and busy streets
  - Goes through natural areas and open space
  - Well maintained
  - Easy and convenient to access
  - Good connectivity/network around town
- For "what should be done to improve the FUTS," the most common suggestions from respondents are:
  - Connect missing segments
  - Build more trails
  - Enhance street crossings
  - Better/more signing
  - Surface maintenance

### New trails and trail improvements

- This survey included a mapping exercise, wherein respondents were invited to place points on a map of Flagstaff to indicate where new trails or trail connections should be built, and where improvements and enhancements are needed along existing trails. Respondents were also required to write a brief description to explain each point.
- Of the 72 points placed for improvements and enhancement to existing FUTS trails, 15 refer to enhanced crossings, and 13 request improvements to the trail surface.
- Respondents placed 427 points on the map for new trails and trail connections. Of these points, 206 refer to planned trails that are illustrated on the FUTS master plan, and 221 describe new trails that are not on the FUTS master plan.
- Point on the map represent 85 different trail segments and connections.
   The four trail segments that garnered the most points include:

- A new trail that connects through Downtown and Southside
- The Santa Fe Trail, which follows the south side of the BNSF tracks from La Plaza Vieja to Railroad Springs
- A new trail that is parallel to and an alternate to Milton Road
- Completion of the Foxglenn Trail through Little America from Foxglenn
   Park to water treatment pond
- Thirty-seven of the mapped points call for FUTS connections from Flagstaff to outlying communities, including Kachina Village, Fort Valley, and Doney Park.



## 3 | Respondent profile

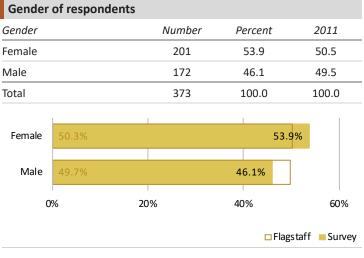
#### Gender

 A significantly higher percentage of survey respondents are female
 53.9 percent to 46.1 percent male (Table/Figure 1).

This result is not in keeping with the gender split of the general population of Flagstaff, which is 50.3 percent female and 49.7 percent male; or the 2011 survey, which was 50.5 percent female to 49.5 percent male. Both the general population and the previous survey are divided more evenly by gender.

One potential reason for the imbalance may be that followers on the FUTS Facebook page, where the survey was heavily promoted, are heavily female (62 to 37 percent).

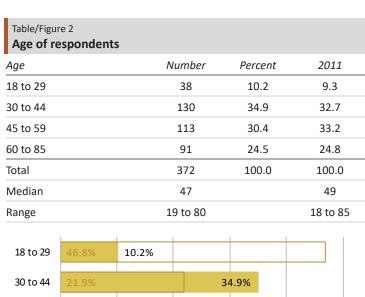
Table/Figure 1

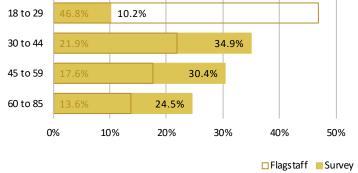


#### Age

Survey respondents tend to be significantly older than the general population of Flagstaff.

- The largest percentage of respondents (34.9 percent) fall into the 30 to 44 age category (34.9 percent). Another 30.4 percent are between the ages of 45 and 59, and 24.5 percent are 60 years or older.
- Only 10.2 percent of respondents are in the youngest – 18 to 29 – age category.
- Compared to the population of Flagstaff, survey respondents are over-represented in all three categories from age 30 on, and





significantly under-represented in the youngest category.

- The median age of survey respondents is 47, which is significantly older than the Flagstaff median age of 27, but similar to the median age of 49 from the 2011 survey.
- Respondents range in age from 19 to 80 years.

While the age characteristics of survey respondents is at variance with that of the Flagstaff population, it does match very closely the results of the 2011 survey. Percentages in each age group from the 2011 survey are listed in Table 2 and the population breakdown for the general Flagstaff population is depicted on the chart in Figure 2.

One potential reason for the discrepancy in ages is that both the 2011 and the 2017 surveys were conducted during the summer months, when Northern Arizona University is not in session and presumably many students have left town.

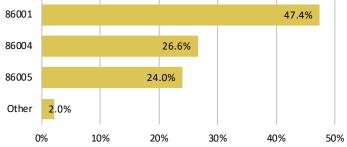
#### Residence

#### ZIP Code

- Almost half of respondents live in the 86001 ZIP code (47.4 percent). About a quarter each live in the 86004 (26.6 percent) and 86005 (24.0 percent) ZIP codes (Table/Figure 3).
- Only seven respondents (2.0 percent of respondents) live in
   ZIP codes outside of the Flagstaff area.

The 86001 ZIP code generally comprises the west side of Flagstaff north of Interstate 40, while 86004 covers the east side and 86005 includes the southwest portion of town

Table/Figure 3  ZIP code of respondents			
ZIP		Number	Percent
86001		162	47.4
86004		91	26.6
86005		82	24.0
Other		7	2.0
		342	100.0
		1 1	
86001	'		47.4%

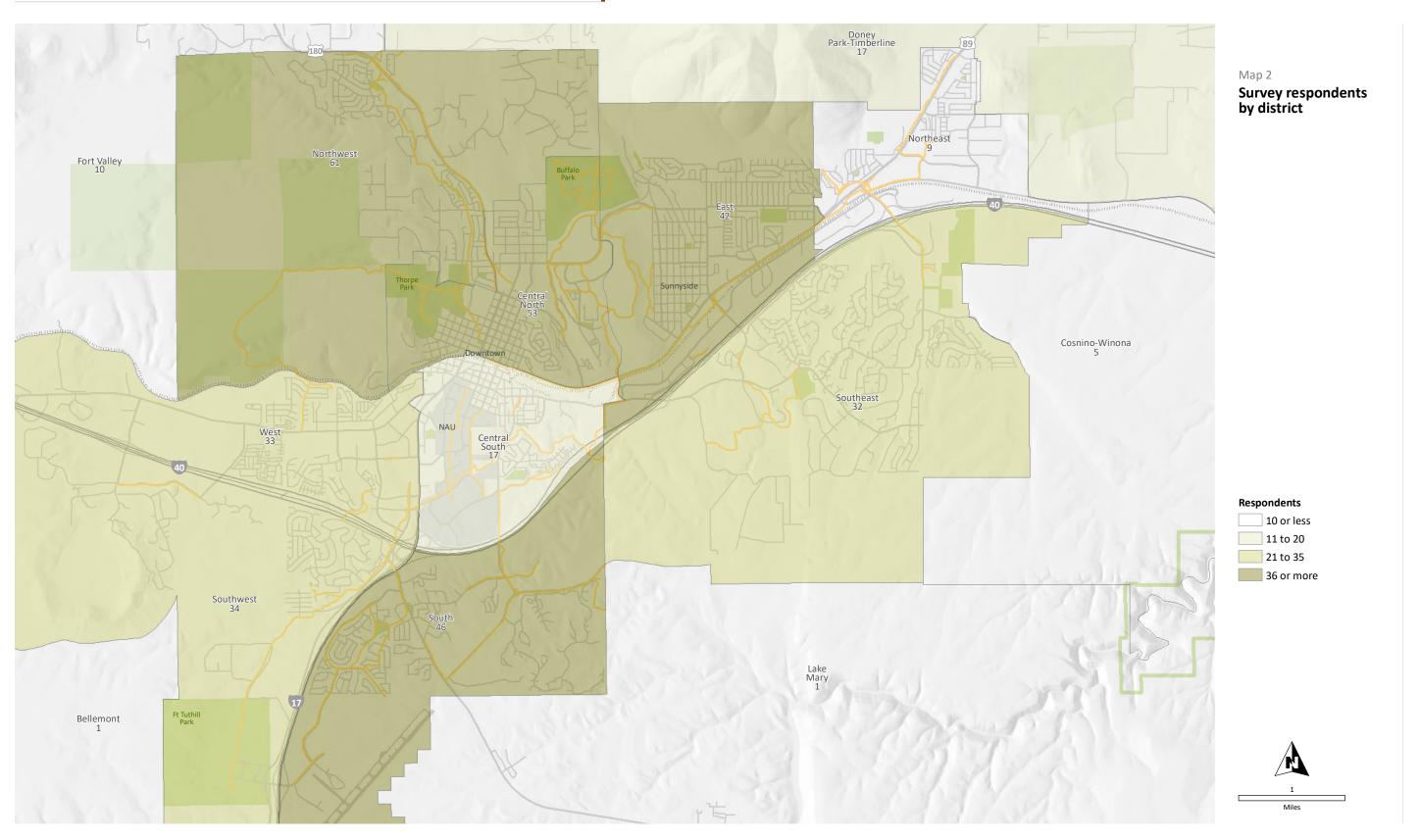


### Flagstaff districts

Flagstaff districts where respondents live are summarized in Table 4. Map 2 on the following page depicts the location and responses from each district.

- The most-heavily represented districts in regard to survey responses include the Northwest (61 respondents), Central North (53) South (46) and East (42).
- The Central South district had relatively few respondents (17), possibly because this area is dominated geographically by NAU, which was not in session.
- There were relatively few responses from individuals living in outlying communities: a total of 42 respondents or 11.2 percent of the total.
- Among the outlying communities, the most responses were received from Doney Park (17 surveys) and Fort Valley (10).

Table 4 Flagstaff districts where respondents live						
District	Number	Percent				
Northwest	61	16.3				
Central North	53	14.1				
South	46	12.3				
East	42	11.2				
Southwest	34	9.1				
West	33	8.8				
Southeast	32	8.5				
Central South	17	4.5				
Doney Park	17	4.5				
Fort Valley	10	2.7				
Northeast	9	2.4				
Kachina Village	8	2.1				
Cosnino - Winona	5	1.3				
Bellemont	1	0.3				
Lake Mary	1	0.3				
Outside Flagstaff region	6	1.6				
	375	100.0				



## 4 FUTS trail use

### Frequency and duration of trail use

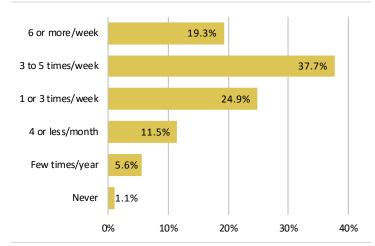
Survey respondents are frequent and regular FUTS trails users. This is not a surprising result, given that outreach targeted trails users, and that regular trail users would be more motivated to take the survey than the community at-large.

### Frequency of use

- Overall, four in five respondents to this survey (81.9 percent) use the trails at least one time per week (Table/Figure 5).
- Almost two in five respondents (37.7 percent) use the trails between three to five times per week, and one in five (19.3 percent) use the trail six or more times per week.
- Very few survey takers only four individuals representing 1.1 percent of the total – reported that they never use FUTS trails.

Results regarding frequency of use are very similar to the result of the 2011 survey, with two exceptions. Respondents who use the FUTS four or fewer times per month decreased from 19.1 to 11.5 percent; and those who use the trail 1 or 2 times per week increased from 18.6 to 24.9 percent.

Table/Figure 5 Frequency of use of FUTS trails							
Frequency	Number	Percent	2011				
6 or more times per week	72	19.3	19.1				
3 to 5 times per week	141	37.7	38.2				
1 or 2 times per week	93	24.9	18.6				
4 or fewer times per month	43	11.5	19.1				
A few times per year	21	5.6	4.5				
Never, don't use them	4	1.1	0.5				
Total	374	100.0	100.0				

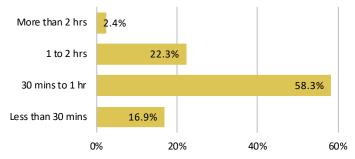


#### **Duration of use**

- Almost 60 percent of respondents (58.3 percent) are typically on the trails between 30 and 60 minutes (Table/Figure 6 on the following page).
- For another 22.3 percent, their typical visit lasts between one and two hours. Results regarding duration of visit match the 2011 survey quite closely.

These results also track well with the findings of the *City of Flagstaff Citizens Survey 2009*, a random sample survey which found that nearly four out of five residents (78 percent), had used the FUTS system in the past year. This survey has not been repeated since 2009.

Table/Figure 6 Time spent on FUTS on a typical visit							
Duration	Number	Percent	2011				
More than 2 hours	9	2.4	2.8				
1 to 2 hours	83	22.3	27.1				
30 minutes to 1 hour	217	58.3	53.7				
Less than 30 minutes	63	16.9	16.5				
Total	372	100.0	100.0				



#### When trails are used

Trail use statistics by time of day, part of week, and season of year are summarized in Tables/Figures 7 through 9 on this page and the next.

#### Time of day

- Mornings are the most popular time to be on the trails, followed by afternoons and then evenings.
- Nighttime use is light, with only 6.2 percent of respondents (23 out of 371) indicating that they use FUTS trails at night.

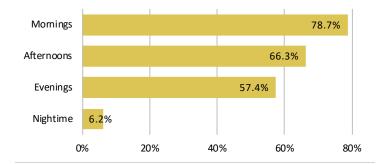
#### Part of week

 FUTS trails are used on weekdays slightly more than they are used on weekends (92.7 percent versus 87.6 percent).

### Season of year

- Three seasons spring, summer, and fall see consistent and heavy trail use, with more than 90 percent of respondents in each season.
- Summer sees slightly more use, with 98.7 percent of respondents, than its two shoulder seasons.

Table/Figure 7 Time of day when FUTS are used							
Time of day	Number	Percent	2011				
Mornings	292	78.7	66.2				
Afternoons	246	66.3	47.5				
Evenings	213	57.4	46.1				
Nightime	23	6.2	5.5				
Respondents	371						



Table/Figure 8  Part of week when FUTS are used							
Part of week			Number	Percent		2011	
Weekdays			343	92.7		89.8	
Weekends			324	87.6		74.4	
Respondents	;		370				
					ı		
Weekdays					92.7%		
Weekends				8	7.6%		
C	)%	20%	40%	60%	80%	100%	

 Trail use drops off considerably during the winter, although more than half (53.1 percent) of respondents indicate that they continue to use FUTS during winter months.

All of these results are similar to the results of the 2011 survey.

Season		Number	Percent	2011
Spring		355	95.7	92.2
Summer		366	98.7	96.8
Fall		355	95.7	93.6
Winter		197	53.1	47.5
Responden	ts	371		
Spring				95.7%
Summer				98.7%
Fall				95.7%
Winter		53.1%		

40%

60%

80%

100%

0%

20%

### **Activities and purpose**

Tables/Figures 10 and 11 summarize the outcome of two questions that asked participants about their primary activities and their purpose for using the FUTS. For both questions, respondents were able to check multiple categories.

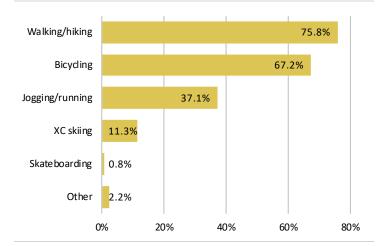
#### **Activities**

- Primary activities on FUTS include walking or hiking with more than three-quarters of respondents (75.8 percent) and bicycling with about two-thirds of respondents (67.2 percent).
- A smaller, but still significant percentage of respondents (37.1) use the FUTS for jogging or running.

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- The most-frequently cited purposes for using FUTS trails include recreation and relaxation (87.1 percent), health, exercise and fitness (83.0 percent) and experiencing nature and open space (70.1 percent).
- Just about half (50.1 percent)
   of respondents listed commut ing and transportation as one of
   their purposes for using the FUTS
   system.

Table/Figure 10 Primary activities on FUTS trails							
Activity	Number	Percent	2011				
Walking/hiking	282	75.8	71.4				
Bicycling	250	67.2	64.5				
Jogging/running	138	37.1	35.9				
XC skiing/snowshoeing	42	11.3	15.5				
Skateboarding	3	0.8	0.5				
Other	8	2.2	4.1				
Respondents	372						



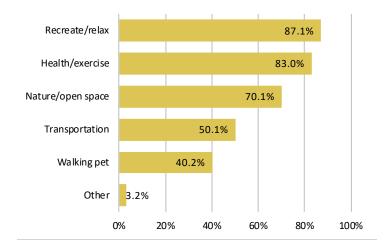
Although commuting and transportation ranks fourth in the list of purposes, the fact that half of all respondents use the trails for commuting indicate that it remains a very important component of Flagstaff's transportation network.

Again, the results regarding activities and purposes track very closely with the 2011 survey. For both topics, the ranked order of activities and purposes is identical between 2011 and 2017.

In most cases, the percentage of respondents between the two surveys is very similar for both activities and purposes. Notable exceptions include the percentage of respondents who use FUTS to experience nature and open space,

which increased from 56.0 to 70.1 percent between 2011 and 2017; and the percentage of respondents who walk a pet, which increased from 29.2 to 40.2 percent.

Table/Figure 11 Purpose for using FUTS trails							
Activity	Number	Percent	2011				
Recreation/relaxation	323	87.1	79.6				
Health/exercise/fitness	308	83.0	78.2				
Nature/open space	260	70.1	56.0				
Commuting/transportation	186	50.1	50.9				
Walking a pet	149	40.2	29.2				
Other	12	3.2	3.7				
Respondents	371						



### **Getting to the FUTS**

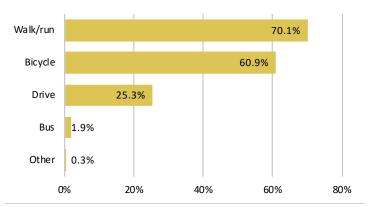
Most users travel to FUTS trails using various forms of active transportation, rather than driving. This may be a consequence of generally good accessibility to the FUTS from most of the community.

- Most users either walk or run (70.1 percent) or bicycle (60.9 percent) to get to the FUTS (Table/Figure 12).
- Only a quarter of respondents (25.3 percent) indicate that they drive a vehicle to access the FUTS system.

While there are a few trailhead parking areas at various locations around the system, notably at Buffalo Park, Thorpe Park, and Lone Tree Road, most trails do not include vehicular parking areas.

Given that most trail users are going to the FUTS to walk, bicycle, or jog, it would seem to make sense to focus resources on making trails convenient and accessible so more users can walk, bicycle, or jog from where are, rather than building parking areas to faciliate driving to FUTS.

Table/Figure 12 Mode of transportation to FUTS							
Mode	Number	Percent	2011				
Walk or run	260	70.1	42.7				
Bicycle	226	60.9	35.8				
Drive	94	25.3	20.6				
Public transit – bus	7	1.9	0.9				
Other	1	0.3	0.0				
Respondents	371		100.0				



For this question, a comparison to 2011 results is more difficult because of a small difference in the way the question was asked. In the 2017 survey, respondents were allowed to check multiple modes in answer to how they typically get to the FUTS, whereas in 2011 respondents could select only one mode. As a result, the percentages are not directly comparable.

### **Commuting on the FUTS**

Trail use among respondents who use FUTS trails as part of their regular commute is included in Tables/Figures 13 and 14.

#### Mileage of commute

- Most trail users' commutes are fairly short; just under half of respondents to this question (46.7 percent) travel less than five miles round-trip for their daily commute, and another 37.0 percent travel between 6 and 10 miles.
- Respondents' round-trip commutes range from 1 mile to 30 miles, with an average length of 7.2 miles and a median length of 6.0 miles

#### Percentage of commute

 For a little more than one-third of trail users (36.4 percent) who use the trails for commuting, more than half of their commute is on FUTS trails (Table/Figure 14).

Table/Figure 13  Round trip mileage of typical commute						
Length	e or typ	icai coiiii		lumber	P	ercent
Less than 5 miles				86		46.7
6 to 10 miles				68		37.0
11 to 15 miles				15		8.2
More than 15 miles				15		8.2
Total				184	:	100.0
Median				6.0		
Mean				7.2		
Range			1	L to 30		
Less than 5 miles					46.7%	6
6 to 10 miles				37.0%		
11 to 15 miles	8.2%					
More than 15 miles	8.2%					

Percent	Number	Percent
Less than 25 percent	59	30.3
25 to 50 percent	65	33.3
50 to 75 percent	49	25.1
More than 75 percent	22	11.3
Total	195	100.0

0%

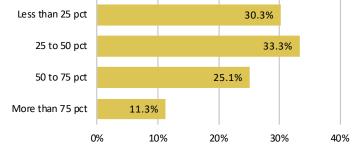
10%

20%

30%

40%

50%



#### Trails used

Table 15 and Map 3 on the following page show the trails that are typically used by respondents. For this question, respondents were able to access a map of FUTS trails as a reference. To keep the list of trails from becoming too cumbersome, only longer or more significant trails were listed.

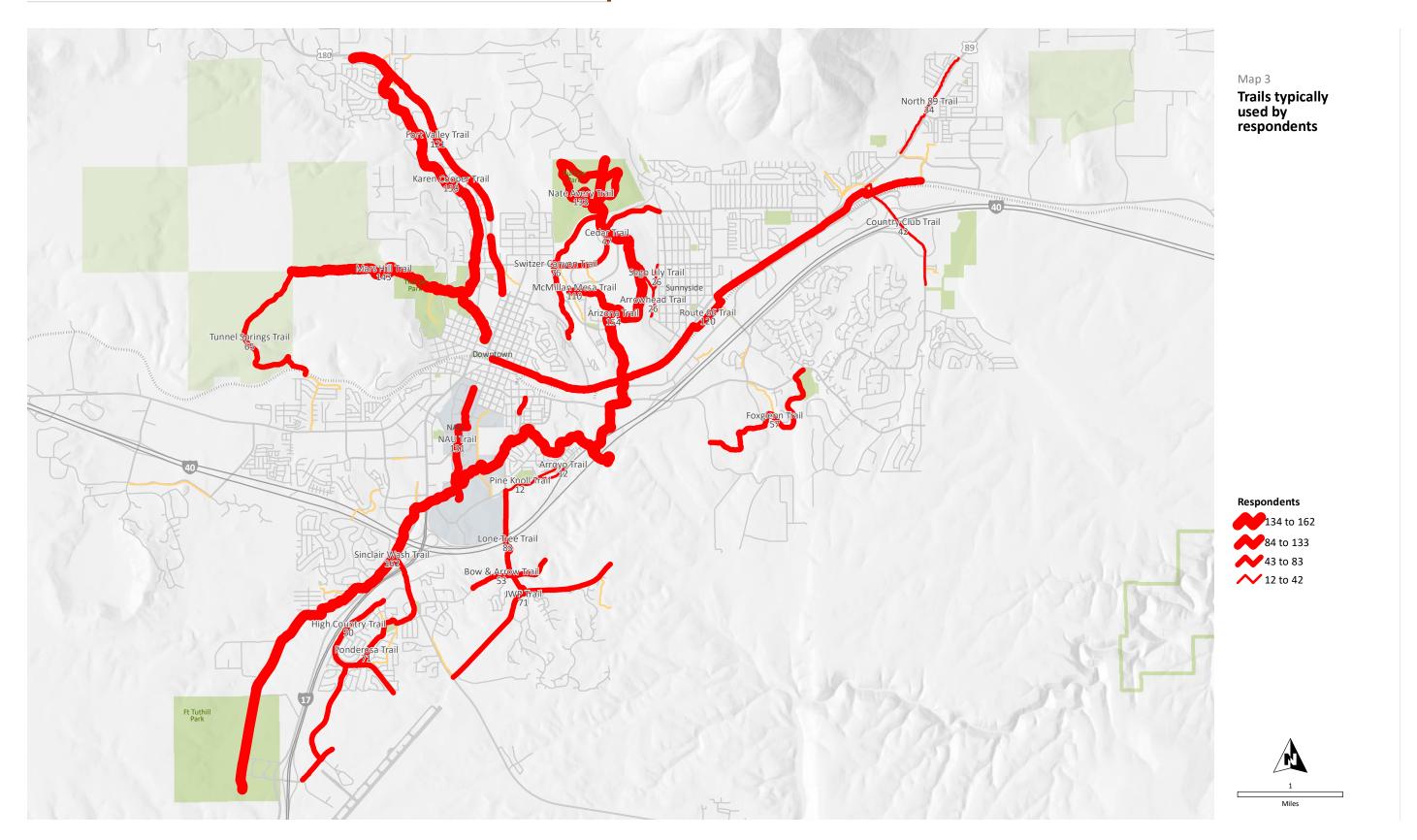
- The most-popular trails for users include the Sinclair Wash Trail, Karen Cooper Trail, Arizona Trail, Mars Hill Trail, Nate Avery Trail, and NAU Trail. All of these trails are used by at least one-third of respondents.
- Trails used less-frequently include the Arroyo and Pine Knoll Trails, Arrowhead and Sego Lily Trails, North 89 Trail, Country Club Trail, Cedar Trail, and High County Trail. None of these trails was typically used by more than 50 respondents (13.5 percent or less).

It will be useful to track the results of this question in future surveys as a way of assessing how changes in the system, like construction of new trails, completion of missing segments, or enhancement of existing trails, affects trail use.

The question does not differentiate between recreational use and transportation use, although this may be instructive to parse in future surveys.

This question is not a substitute for a more robust trail counting program, which would provide more accurate information on volume of trail users.

Trail         Number         Percent           Sinclair Wash Trail         162         43.8           Karen Cooper Trail         159         43.0           Arizona Trail         154         41.6           Mars Hill Trail         143         38.6           Nate Avery Trail         133         35.9           NAU Trail         131         35.4           Fort Valley Trail         121         32.7           Route 66 Trail         120         32.4           McMillan Mesa Trail         110         29.7           Lone Tree Trail         83         22.4           Switzer Canyon Trail         76         20.5           JWP Trail         71         19.2           Ponderosa Trail         71         19.2           Tunnel Springs Trail         65         17.6           Foxglenn Trail         57         15.4           Bow & Arrow Trail         53         14.3           High Country Trail         50         13.5           Cedar Trail         47         12.7           Country Club Trail         42         11.4           North 89 Trail         42         7.0           Arrowhead/Sego Lily Trail	Table 15 Trails typically used by respondents		
Karen Cooper Trail       159       43.0         Arizona Trail       154       41.6         Mars Hill Trail       143       38.6         Nate Avery Trail       133       35.9         NAU Trail       131       35.4         Fort Valley Trail       121       32.7         Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Trail	Number	Percent
Arizona Trail       154       41.6         Mars Hill Trail       143       38.6         Nate Avery Trail       133       35.9         NAU Trail       131       35.4         Fort Valley Trail       121       32.7         Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Sinclair Wash Trail	162	43.8
Mars Hill Trail       143       38.6         Nate Avery Trail       133       35.9         NAU Trail       131       35.4         Fort Valley Trail       121       32.7         Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Karen Cooper Trail	159	43.0
Nate Avery Trail       133       35.9         NAU Trail       131       35.4         Fort Valley Trail       121       32.7         Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Arizona Trail	154	41.6
NAU Trail       131       35.4         Fort Valley Trail       121       32.7         Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Mars Hill Trail	143	38.6
Fort Valley Trail 121 32.7  Route 66 Trail 120 32.4  McMillan Mesa Trail 110 29.7  Lone Tree Trail 83 22.4  Switzer Canyon Trail 76 20.5  JWP Trail 71 19.2  Ponderosa Trail 71 19.2  Tunnel Springs Trail 65 17.6  Foxglenn Trail 57 15.4  Bow & Arrow Trail 57 15.4  Bow & Arrow Trail 50 13.5  Cedar Trail 47 12.7  Country Club Trail 42 11.4  North 89 Trail 34 9.2  Arrowhead/Sego Lily Trail 26 7.0  Arroyo/Pine Knoll Trail 12 3.2  Other 15 4.1	Nate Avery Trail	133	35.9
Route 66 Trail       120       32.4         McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	NAU Trail	131	35.4
McMillan Mesa Trail       110       29.7         Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Fort Valley Trail	121	32.7
Lone Tree Trail       83       22.4         Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Route 66 Trail	120	32.4
Switzer Canyon Trail       76       20.5         JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	McMillan Mesa Trail	110	29.7
JWP Trail       71       19.2         Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Lone Tree Trail	83	22.4
Ponderosa Trail       71       19.2         Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Switzer Canyon Trail	76	20.5
Tunnel Springs Trail       65       17.6         Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	JWP Trail	71	19.2
Foxglenn Trail       57       15.4         Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Ponderosa Trail	71	19.2
Bow & Arrow Trail       53       14.3         High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Tunnel Springs Trail	65	17.6
High Country Trail       50       13.5         Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Foxglenn Trail	57	15.4
Cedar Trail       47       12.7         Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Bow & Arrow Trail	53	14.3
Country Club Trail       42       11.4         North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	High Country Trail	50	13.5
North 89 Trail       34       9.2         Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Cedar Trail	47	12.7
Arrowhead/Sego Lily Trail       26       7.0         Arroyo/Pine Knoll Trail       12       3.2         Other       15       4.1	Country Club Trail	42	11.4
Arroyo/Pine Knoll Trail         12         3.2           Other         15         4.1	North 89 Trail	34	9.2
Other 15 4.1	Arrowhead/Sego Lily Trail	26	7.0
	Arroyo/Pine Knoll Trail	12	3.2
Respondents 370	Other	15	4.1
	Respondents	370	



## 5 Respondents ratings of FUTS trails

A series of questions in this section of the survey asked respondents to rate trails as excellent, good, fair, or poor in three areas: maintenance, safety and security, and cleanliness.

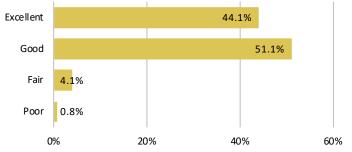
The questions replicate inquiries made in the 2011 survey, so direct comparisons to that survey are possible. Respondents were also asked to describe their concerns and to indicate a location.

In general, respondents' ratings of the FUTS system are fairly high for these three topics, although there is evidence that ratings have slipped slightly from the 2011 survey.

#### Maintenance

- 44.1 percent of respondents rated FUTS maintenance as excellent, and another 51.1 percent rated it as good (Table/Figure 16).
- The most significant concern expressed by respondents is surface conditions, which was cited in 29 of 92 comments regarding maintenance (Table/Figure 18 on the following page). Typical concerns in this category include cracks and gaps in paved trails and rutted, loose, or rough surfaces on aggregate trails.
- Drainage and erosion problems account for 25 of 92 maintenance concerns.

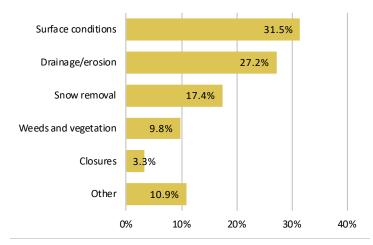
Table/Figure 16  Respondents rating	g of maintenance		
Rating	Number	Percent	2011
Excellent	163	44.1	50.9
Good	189	51.1	46.3
Fair	15	4.1	2.8
Poor	3	0.8	0.0
Total	370	100.0	100.0
1	1	1	

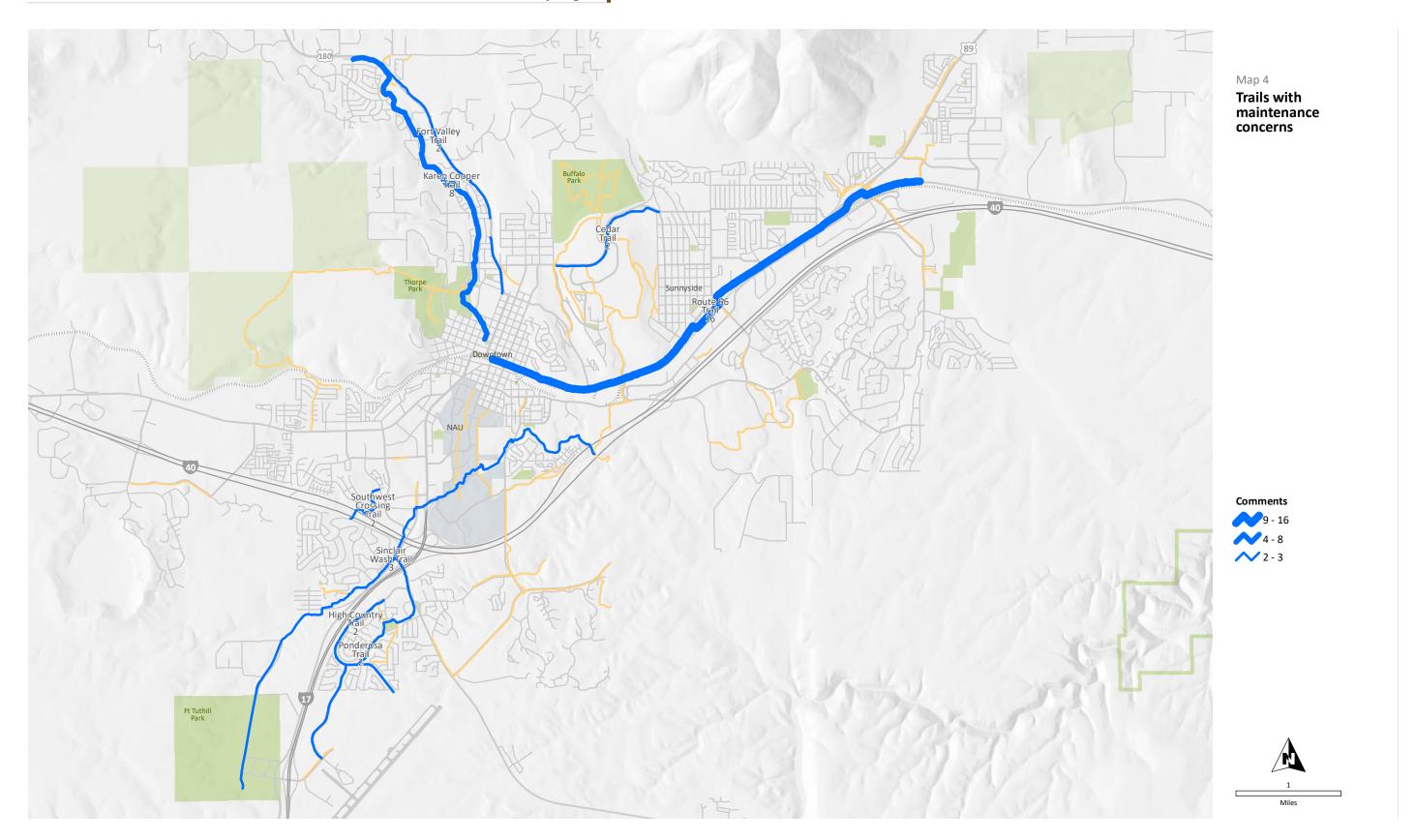


On 48 surveys, respondents described specific locations or trails where maintenance is a concern. The trails most frequently cited for maintenance concerns are the Route 66 Trail (16 surveys) and the Karen Cooper Trail (eight surveys). No other trail was listed more than three times. Trails that were cited for maintenance problems are listed in Table 17 on the following page and depicted on Map 4 on page 25.

Table 17  Trails cited for maintenance concerns				
Trail	Number	Percent		
Route 66 Trail	16	33.3		
Karen Cooper Trail	8	16.7		
Sinclair Wash Trail	3	6.3		
Ponderosa Trail	2	4.2		
Fort Valley Trail	2	4.2		
SW Crossing Trail	2	4.2		
High Country Trail	2	4.2		
Cedar Trail	2	4.2		
Other trails	11	22.9		
Total	48	100.0		

#### Table/Figure 18 **Maintenance concerns** Number Percent Concerns Surface conditions 29 31.5 Drainage/erosion 25 27.2 Snow removal 16 17.4 9 Weeds and vegetation 9.8 Closures 3 3.3 Other 10.9 10 Total 92 100.0

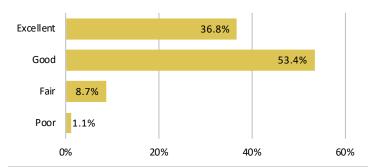




### Safety and security

- Safety and security were rated as excellent by 36.8 percent of respondents, and good by another 53.4 percent (Table/Figure 19).
- The most-frequently cited safety and security concern is the presence of transients along trails, which was included in 28.5 percent of the 123 surveys that listed safety and security concerns (Table/Figure 21 on the following page).
- Other safety and security issues include street crossings (11.4 percent), the lack of lighting along trails (10.6 percent), dogs off leash (9.8 percent), and traffic (8.1 percent). General, nonspecific safety concerns were also listed on 10.6 percent of responses.

Table/Figure 19 Respondents rating of safety and security				
Rating	Number	Percent	2011	
Excellent	135	36.8	37.9	
Good	196	53.4	56.1	
Fair	32	8.7	5.6	
Poor	4	1.1	0.5	
Total	367	100.0	100.1	

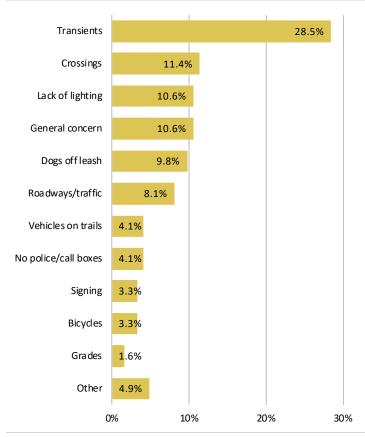


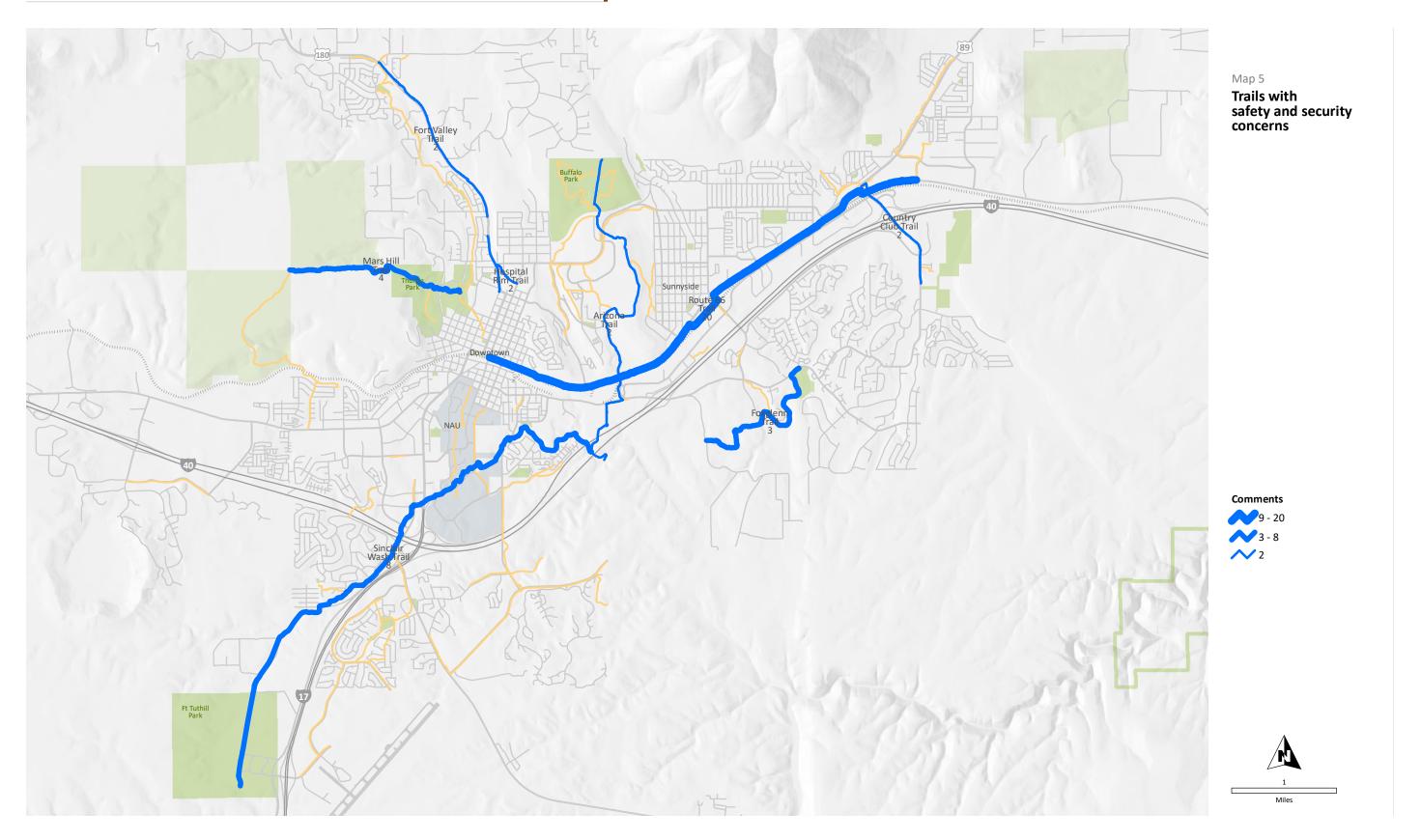
Among specific locations, the Route 66 Trail is cited in 20 responses, and the Sinclair Wash Trail is included eight times. No other trail is mentioned more than four times. A total of 46 surveys include specific locations for safety and security concerns. Trails cited are listed in Table 20, and depicted on Map 5 on page 28.

The presence of transients is by far the most-commonly expressed concern regarding safety and security; it is referenced on 35 surveys. The second-highest concern - crossings - was only mentioned on 14 surveys. The presence of transients is not a straightforward issue relative to safety and security along FUTS trails; while they may cause some users to feel uncomfortable or intimidated, most individuals do not pose any kind of threat.

Table 20  Trails cited for safety and security concerns				
Number	Percent			
20	43.5			
8	17.4			
4	8.7			
3	6.5			
2	4.3			
2	4.3			
2	4.3			
2	4.3			
3	6.5			
46	100.0			
	Number  20  8  4  3  2  2  2  2  3			

Table/Figure 21  Safety and security concerns		
Concerns	Number	Percent
Transients	35	28.5
Crossings	14	11.4
Lack of lighting	13	10.6
General concern	13	10.6
Dogs off leash	12	9.8
Roadways/traffic	10	8.1
Vehicles on trails	5	4.1
No police/call boxes	5	4.1
Signing	4	3.3
Bicycles	4	3.3
Grades	2	1.6
Other	6	4.9
Total	123	100.0





#### Cleanliness

- Respondents' ratings for cleanliness are evenly split between excellent (47.3 percent) and good (47.8 percent) (Table/Figure 22).
- Primary concerns for cleanliness include trash and litter, which was included on just over half (51.3 percent) of the surveys that reported cleanliness concerns. Pet waste is the only other significant cleanliness concern, and is cited on 35.0 percent of surveys (Table/ Figure 24 on the following page).
- Only 14 surveys list locations or trails where there are cleanliness concerns. The Route 66 Trail was mentioned most frequently, although it is only on four surveys. The Foxglenn Trail (three) and the

Table/Figure 22 **Respondents rating of cleanliness** Rating Number Percent 2011 Excellent 174 47.3 51.2 Good 176 47.8 45.2 3.7 Fair 16 4.3 2 0.5 0.0 Poor Total 368 100.0 100.0

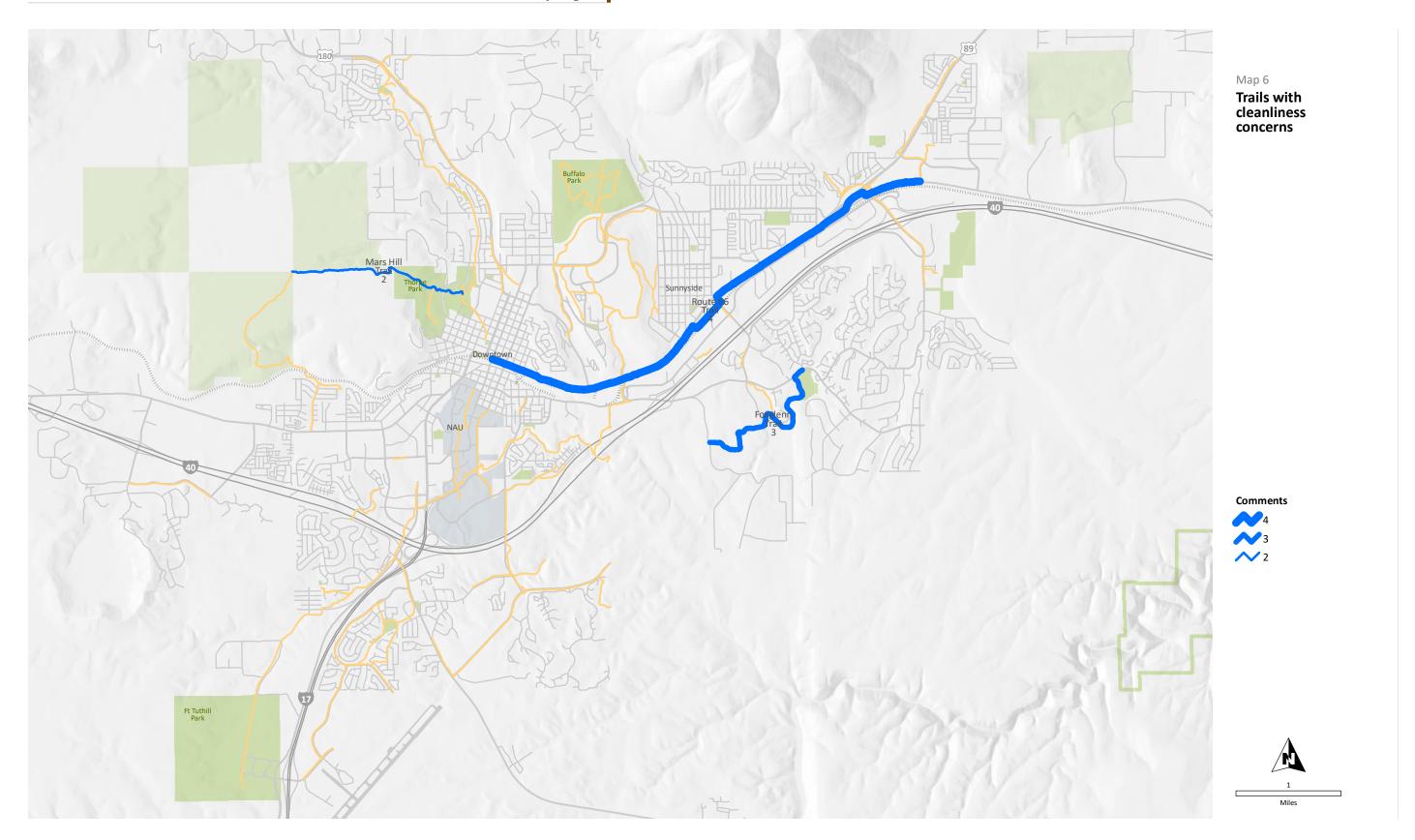
Excellent			47.3%	
Good			47.8%	
Fair	4.3%			
Poor	0.5%			
0	%	20%	40%	60%

Mars Hill Trail (two) are the only other trails that are referenced multiple times. Trails are listed in Table 23, and illustrated on Map 6 on page 31.

Cleanliness is the highest rated of the three topics in that is received the highest percentage of excellent ratings, and garnered the fewest comments about concerns (80 comments versus 123 for safety and security and 92 for maintenance). The concerns that are listed fall into only three categories; trash/litter, pet waste, and graffiti.

Table 23  Trails cited for cleanliness concerns		
Trail	Number	Percent
Route 66 Trail	4	28.6
Foxglenn Trail	3	21.4
Mars Hill Trail	2	14.3
Other trails	5	35.7
Total	14	100.0

Concern				Number	Percent
Trash/litter				41	51.3
Pet waste 28		35.0			
Graffiti				4 5.	
Other				7 8	
Total				80	100.0
Trash/litter				51.3	%
Pet waste			35.0%		
Graffiti	5.0%				
Other	8.8%				
0%		20%		40%	60%



#### **Overall ratings scores**

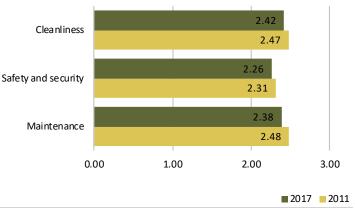
Respondent's ratings of excellent, good, fair, or poor for the three topics can be translated into an overall ratings score that more readily allows comparisons between topics and between the 2011 and 2017 surveys.

To translate the ratings into a single score, numeric scores are assigned to each rating: 3 for excellent, 2 for good, 1 for fair, and 0 for poor and then averaged for each topic.

The results of this scoring are included in Table/Figure 25.

- Across the three topics, cleanliness has the highest rating at
   2.42, followed by maintenance at
   2.38, and safety and security at
   2.26.
- In the 2011 survey, maintenance scored highest at 2.48, followed closely by cleanliness at 2.47. Safety and security was rated lowest in both surveys.
- Rating scores for all three topics dropped slightly between 2011 and 2017. The drop in scores follows from the ratings; the percentage of respondents who assigned a rating of excellent fell from 2011 to 2017 for all three topics.

Table/Figure 25  Overall ratings so	ores		
Торіс		2017	2011
Maintenance		2.38	2.48
Safety and security		2.26	2.31
Cleanliness		2.42	2.47
Cleanliness		2.42	



The temptation to read too much significance into the declines should probably be avoided. Ratings are subjective, and the declines are relatively small. Nonetheless, if this survey is repeated in the future, it will be worthwhile to monitor progress or declines in these measures.

# 6 What's good and what could be improved

This section summarizes responses to the survey's two open-ended questions:

- What do you like about the FUTS?
- What should be done to improve the FUTS?

Both questions were also asked in the 2011 survey, although the wording of the second question varies slightly from the 2011 version, "what is most in need of improvement about the FUTS."

For both questions, responses were grouped into categories or similar themes. Individual comments may vary from respondent to respondent in terms of how they were worded, but are grouped together when a similar thought or concept is expressed. Where possible, the same categories from the 2011 survey were used to permit direct comparison.

The open-ended design of the questions meant the responses took considerably longer to compile, as compared to check boxes for multiple-choice questions. However, the resulting information is more meaningful in some ways because it represents respondents' unprompted thoughts rather than responses to a limited number of options suggested by the survey.

#### What's good

In response to the question, "what do you like about the FUTS," 226 respondents submitted 453 individual comments. All of these comments have been grouped into categories and are summarized in Table 26.

 The two most-frequently cited comments from the 2017 survey are the same as the 2011 survey.

Table 26		
What respondents like about the FUTS		
Comment	Number	Percent
Avoids traffic and busy streets	58	25.7
Goes through natural areas and open space	55	24.3
Well maintained	44	19.5
Easy and convenient to access	38	16.8
Good connectivity/network around town	32	14.2
Community asset	27	11.9
Promotes commuting/active transportation	23	10.2
General positive	21	9.3
System is extensive, community-wide	17	7.5
Quiet, peaceful, uncrowded experience	16	7.1
Safety	16	7.1
Health, exercise, and recreation	15	6.6
Social interaction	13	5.8
Variety of trails	11	4.9
Width	11	4.9
Good for walking or biking	10	4.4
Unpaved surfaces	10	4.4
New signing	9	4.0
For both transportation and recreation	8	3.5
Access to surrounding forest	5	2.2
Community support	5	2.2
Allows users to explore Flagstaff	4	1.8
Other	5	2.2
Total comments	453	
Total respondents	226	

The most common attribute, "avoids traffic and busy streets" was cited by just over a quarter of respondents (25.7 percent) in the 2017 survey, while the second, "goes through natural areas and open space" was listed by just under a quarter of respondents (24.3 percent).

- "Well-maintained" is third on the list of attributes in 2017, much higher than its seventh position in 2011. The percentage of respondents listing "well-maintained" also increased from 8.9 percent in 2011 to 19.5 percent in 2017.
- The concepts of accessibility and connectivity placed in the top five in both surveys. In the 2017 survey, "easy and convenient to access" was the fourthhighest attribute with 16.8 percent of respondents, and "good connectivity/ network around town" placed fifth with 14.2 percent.

#### What needs improvement

For the question, "what should be done to improve the FUTS," 271 individual comments were submitted from 164 respondents. Comments have been categorized and are summarized in Table 27.

- Two comments stand out at the top of the list; "connect missing segments" was suggested by 34.8 percent of respondents to this question and "build more trails" by 25.0 percent.
- The same two were also the top suggestions in the 2011 survey, and the percentage of respondents making the comment is similar. "Connect missing trails" is at 34.8 percent in the 2017 survey and 32.3 percent in 2011, and "build more trails" is at 25.0 percent in the 2017 survey compared to 18.4 percent in 2011.
- "Enhance street crossings" is more prominent in the 2017 survey. Th suggestion moved up in rank from eighth in 2011 to third

Table 27 Respondents suggestions to improve the FUTS				
Comment	Number	Percent		
Connect missing segments	57	34.8		
Build more trails	41	25.0		
Enhance street crossings	20	12.2		
Better/more signing	20	12.2		
Surface maintenance	16	9.8		
Community engagement	13	7.9		
Dogs on leash, pick up after dogs	12	7.3		
Trash pick-up	11	6.7		
Provide amenities	10	6.1		
Improve safety	10	6.1		
Extend trails to outlying neighborhoods	9	5.5		
Snow removal	8	4.9		
More grade-separated crossings	8	4.9		
Connect to regional trails	8	4.9		
Pave trails	6	3.7		
Address drainage problems	5	3.0		
Prohibit/limit motorized bicycles	3	1.8		
Separation from streets	2	1.2		
More gradual grades	2	1.2		
Other	10	6.1		
Total comments	271			
Total respondents	164			

- on the list in 2017, and the percentage of respondents increased from 6.6 percent in 2011 to 12.2 percent in 2017.
- "Better/more signing" was the third-most frequent comment in the 2011 survey, with 11.8 percent of responses. In the 2017 survey, 12.2 percent of respondents again asked for additional or enhanced signing, even though a comprehensive system of more than 400 signs were installed on FUTS in the interval between surveys. Comments in this category typically request additional wayfinding information, such as additional trailhead signs with maps of the FUTS system and more signs showing destinations and distances along the trails.

# 7 | New trails and trail improvements

For the 2017 survey, respondents were invited to place points on a map of Flagstaff to indicate:

- Where new trails or trail connections should be built
- Where improvements and enhancements are needed along existing trails.

The base map in the survey depicted existing trails, as well as planned trails per the Flagstaff Regional Plan, to aid respondents in placing their points. Respondents were also required to write a brief description to explain each point.

The ability to imbed an interactive map in the survey is a feature offered by the Flagstaff Community Forum public engagement tool on the City's website. An interactive map feature was not available for the 2011 survey.

Respondents placed a total of 535 points on the map, including 108 spots for improvements and enhancements and 427 locations for new trails.

All of the points were reviewed individually, assigned to the FUTS trail that they

describe, and categorized into topics based on the description provided.

#### Improvements and enhancements

Points for improvements and enhancements are summarized by category in Table 28 and by trail in Table 29 on the following page.

Of the 108 points for improvements and enhancements, 36 are not relevant to FUTS trails. Typically, non-FUTS suggestions refer to streets where walking and biking facilities are missing or need improvement, but where there is no existing FUTS trail. This leaves 72 suggestions for improvements and enhancements that refer to FUTS trails.

#### By category

Table 28 summarizes comments received for improvements and

Table 28 Improvements and enhancements by category			
Category	Number	Percent	
Crossings	15	20.8	
Surface conditions	13	18.1	
Trash receptacles	7	9.7	
Drainage	5	6.9	
General, non-specific	5	6.9	
Enhancements	4	5.6	
Signing	4	5.6	
Grades	3	4.2	
Paved trails	3	4.2	
Traffic	3	4.2	
Trash	3	4.2	
Bike/ped interaction	2	2.8	
Restrooms	2	2.8	
Graffiti	1	1.4	
Snow removal	1	1.4	
Weeds	1	1.4	
Total	72	100.0	

#### enhancements by category.

- Fifteen of the 72 points refer to enhanced crossings where FUTS trails cross busy roadways. Six of these 15 suggest improved crossings along the Route 66 Trail, or ways to cross Route 66 from the north to access the trail. Four of the crossing comments suggest locations for grade-separated crossings.
- Improvements to the trail surface was cited in 13 of the 72 comments, including six locations along the Route 66 Trail where the pavement is cracked or crumbling. The remainder of the surface condition comments refer to cracks in various other paved trails and ruts in aggregate-surfaced trails.
- The number of comments for other categories drops off rapidly after the first two categories; although a need for trash receptacles was cited by seven respondents, and drainage problems are listed on five surveys.

Table 29

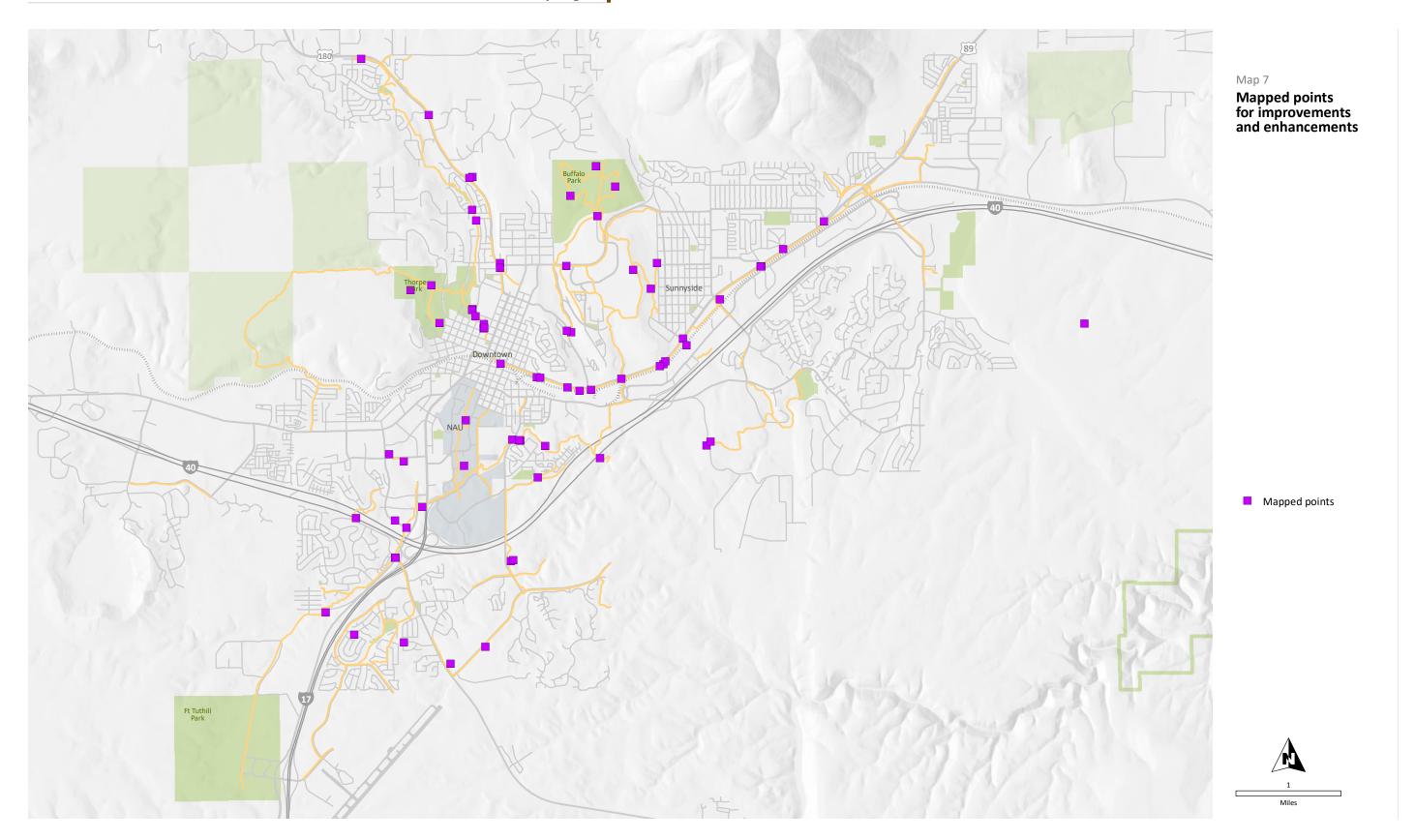
#### By trail

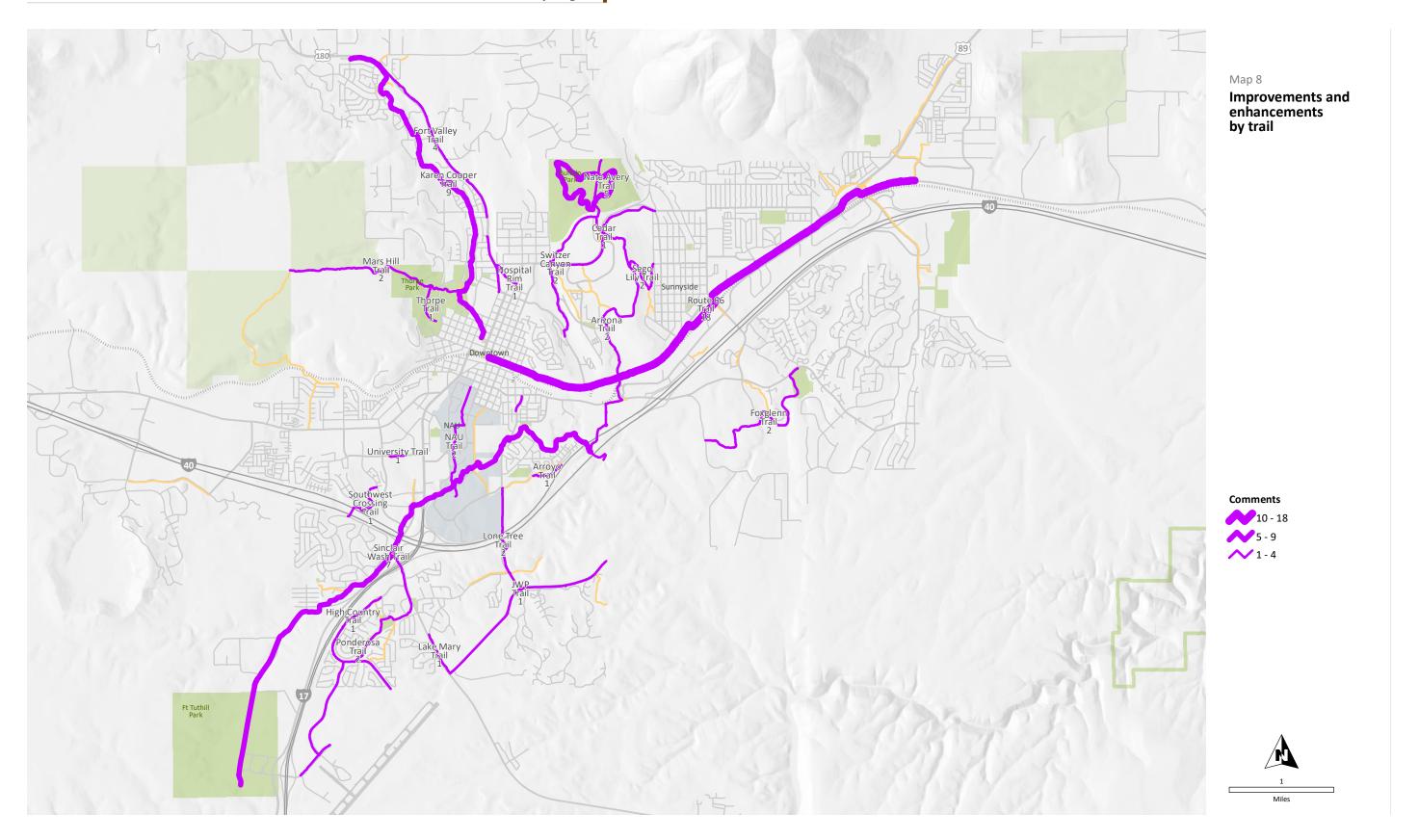
Table 29 shows comments for improvements and enhancements totaled by trail.

- The Route 66 Trail is referenced in a total of 18 of the 72 comments (25.0 percent) for improvements and enhancements. Six of the 18 comments are for better crossings, and another six refer to surface conditions.
- The Karen Cooper Trail is second on the list, but is included in only nine of the 72 comments (12.5 percent). Categories for the nine comments are varied, although three refer to drainage problems at the southern end of the trail.
- Twenty-five different FUTS trails
   were cited in this exercise as
   needing improvements or enhancements. Of these, 14 trails are mentioned
   in multiple comments, and 11 other trails are mentioned just once.

Improvements and enhancements by trail		
Trail	Number	Percent
Route 66 Trail	18	25.0
Karen Cooper Trail	9	12.5
Sinclair Wash Trail	7	9.7
Nate Avery Trail	5	6.9
Fort Valley Trail	4	5.6
Arizona Trail	2	2.8
Foxglenn Trail	2	2.8
Lone Tree Trail	2	2.8
Mars Hill Trail	2	2.8
NAU Trail	2	2.8
Ponderosa Trail	2	2.8
Sego Lily Trail	2	2.8
Switzer Canyon Trail	2	2.8
Woodlands Trail	2	2.8
Other trails	11	15.3
Total	72	100.0

Map 7 on the following page shows the location of the 72 points for improvements and enhancements as placed by respondents. Map 8 on page 39 depicts improvements and enhancements summarized by trail.





#### **New trails**

The second part of the mapping exercise asked respondents to place points on the map to indicate where they think new FUTS trails should be built.

Respondents placed 427 points on the map, including:

- 206 points that reference trails that are already planned, in that they are illustrated on the official FUTS master plan in the Regional Plan.
- 221 points that describe new trails that are unplanned, in that they are not shown on the FUTS master plan and represent new FUTS connections.

All points as placed by respondents for new trails are shown on Map 9 on page 44.

#### **Planned trails**

Table 30 summarizes points on the map that refer to planned FUTS trails. These trails are illustrated on Map 10 on page 45.

- The Santa Fe Trail received the most comments among planned trails with 22. This trail is planned to follow the south side of the BNSF tracks from downtown to the Clay Avenue Wash basin on West Route 66. The trail connects neighborhoods on the west side and would provide an alternative to walking and cycling on West Route 66.
- The Foxglenn Trail, which completes a formal trail connection across the Little America parcel between Foxglenn Park and the

Table 30  Suggestions for new trails - planned trails			
Trail	Number	Percent	
Santa Fe Trail	22	10.7	
Foxglenn Trail	19	9.2	
Sheep Crossing Trail	12	5.8	
Bow & Arrow Trail	11	5.3	
Florence-Walnut Underpass	11	5.3	
Beale Trail	10	4.9	
Picture Canyon Trail	9	4.4	
Switzer Canyon Trail	9	4.4	
JWP Trail West	7	3.4	
Dry Lake Trail South	6	2.9	
Dry Lake Trail West	6	2.9	
Fourth Street Trail	6	2.9	
JWP Trail East	6	2.9	
Route 66 West Trail	5	2.4	
Sinclair Canyon Spur Trail	5	2.4	
Switzer Wash Trail	5	2.4	
Woody Mountain Trail	5	2.4	
Zuni Trail	5	2.4	
Lake Mary Trail North	4	1.9	
Lake Mary Trail South	4	1.9	
Lone Tree Trail North	4	1.9	
Arroyo Trail	3	1.5	
Country Club Trail	3	1.5	
Southside Rio Trail	3	1.5	
Thomas Trail	3	1.5	
Brannen Access	2	1.0	
Linda Vista Trail	2	1.0	
Lone Tree Trail South	2	1.0	
Route 66 East Trail	2	1.0	
Schultz Pass Trail	2	1.0	
Other planned trails	13	6.3	
Total	206	100	

Arizona Trail, is second on the list with 19 comments.

- After these two trails the number of comments drops off somewhat. Other planned trails that received a noteworthy number of comments include the Sheep Crossing Trail (12 comments), Bow & Arrow Trail (11), the Florence Walnut Underpass (11), Beale Trail (10), Picture Canyon Trail (9), and Switzer Canyon Trail (9).
- Of the planned trails, both the Sheep Crossing Trail and the Switzer Canyon Trail are funded, currently under design, and scheduled for construction in 2018.
- Respondents identified 43 different planned FUTS trail segments in the mapping exercise; 30 segments garnered at least two comments, and 13 segments were mentioned only once.

#### **Unplanned trails**

Suggestions submitted for new FUTS trails that are not already on the FUTS master plan are summarized in Table 31, and drawn on Map 11 on page 46.

- The most popular suggestion, with 32 comments, calls for a new north-south trail connection through Downtown and the Southside. This currently unplanned trail would connect the Karen Cooper Trail with the NAU trail on campus and include grade-separated crossings of Route 66 and the BNSF tracks.
- The second-most popular unplanned trail would parallel and provide an alternative to Milton Road for pedestrians and bicyclists. This segment received 21 comments.
- A trail along Butler Avenue, generally between Ponderosa Parkway

Table 31  Suggestions for new trails - unplann	ed trails	
Trail	Number	Percent
New trail - Downtown/Southside	32	18.3
New trail - Milton Rd	21	12.0
New trail - Butler Ave East	13	7.4
New trail - Pipeline	12	6.9
New trail - Elks Lodge	9	5.1
New trail - Fourth St North	8	4.6
New trail - Cedar Ave East	6	3.4
New trail - through Country Club	6	3.4
New trail - Cheshire to Obs Mesa	5	2.9
New trail - Butler Ave West	4	2.3
New trail - East I40 Underpass	4	2.3
New trail - Forest Ave	4	2.3
New trail - Lowell Observatory	4	2.3
New trail - West to Buffalo Park	4	2.3
New trail - Highway 89	3	1.7
New trail - North Downtown	3	1.7
New trail - Route 66 West	3	1.7
New trail - through Greenlaw	3	1.7
New trail - Beulah Blvd	2	1.1
New trail - Fort Tuthill	2	1.1
New trail - Little America to Butler	2	1.1
New trail - Meadow Trail	2	1.1
New trail - Thompson St	2	1.1
New trail - through Southside	2	1.1
New trail - West I40 Underpass	2	1.1
Other new trails	17	9.7
Total	175	100.0

and Fourth Street is called for in 13 comments.

- A trail along the gas pipeline from the Schultz Pass Y trailhead to the Elden Lookout trailhead is described in 12 comments. This trail would be located on the Coconino National Forest in the margin between the north edge of town and the south-facing slopes of Mount Elden and the Dry Lake Hills.
- The Elks Lodge Trail, which is still used as an unofficial, informal trail across private property, received nine comments. This trail extends north from the end of San Francisco Street to the Schultz Pass Y trailhead.
- 42 unique trail segments are covered in the suggestions for new, unplanned trails. This does not include new trail connections to outlying neighborhoods, which are covered in the section below. Twenty-five of the segments received at least two comments, and 17 new trails were cited only once.

A number of new, unplanned trails from the mapping exercise would be located adjacent to busy streets, including Milton Road, Butler Avenue, Fourth Street, Cedar Avenue, and Forest Avenue. It is likely that respondents' comments for these trails are indicative of a desire for a more comfortable facility for walking and biking that is separated from busy roadways.

However, for many of these streets, right-of-way, existing structures, and other space limitations make it unlikely that a FUTS trail could be built along the street. Additionally, where there are numerous driveways and side streets, a trail along the street that allows two-way bicycle traffic may be less safe than on-street facilities for cyclists.

For these cases, one potential alternative solution may be to find ways to make the street a more comfortable environment for both cyclists and pedestrians.

For walking, there are variety of design features to improve the pedestrian environment, including enhancements to the buffer between the sidewalk and traffic lanes, slower traffic speeds, and additional landscaping adjacent to the street. For cycling, buffered or protected bike lanes and slower traffic speeds may help bicyclists feel more comfortable.

#### Trails to outlying communities

Thirty-seven points on the map make suggestions for FUTS trail connections from Flagstaff to five outlying communities. These comments are summarized in Table 32 on the following page.

Kachina Village received the most comments (13) for new trails serving outlying communities. There is an existing single-track trail (the Highland Trail) between the Kachina Wetlands and Fort Tuthill, although it provides more

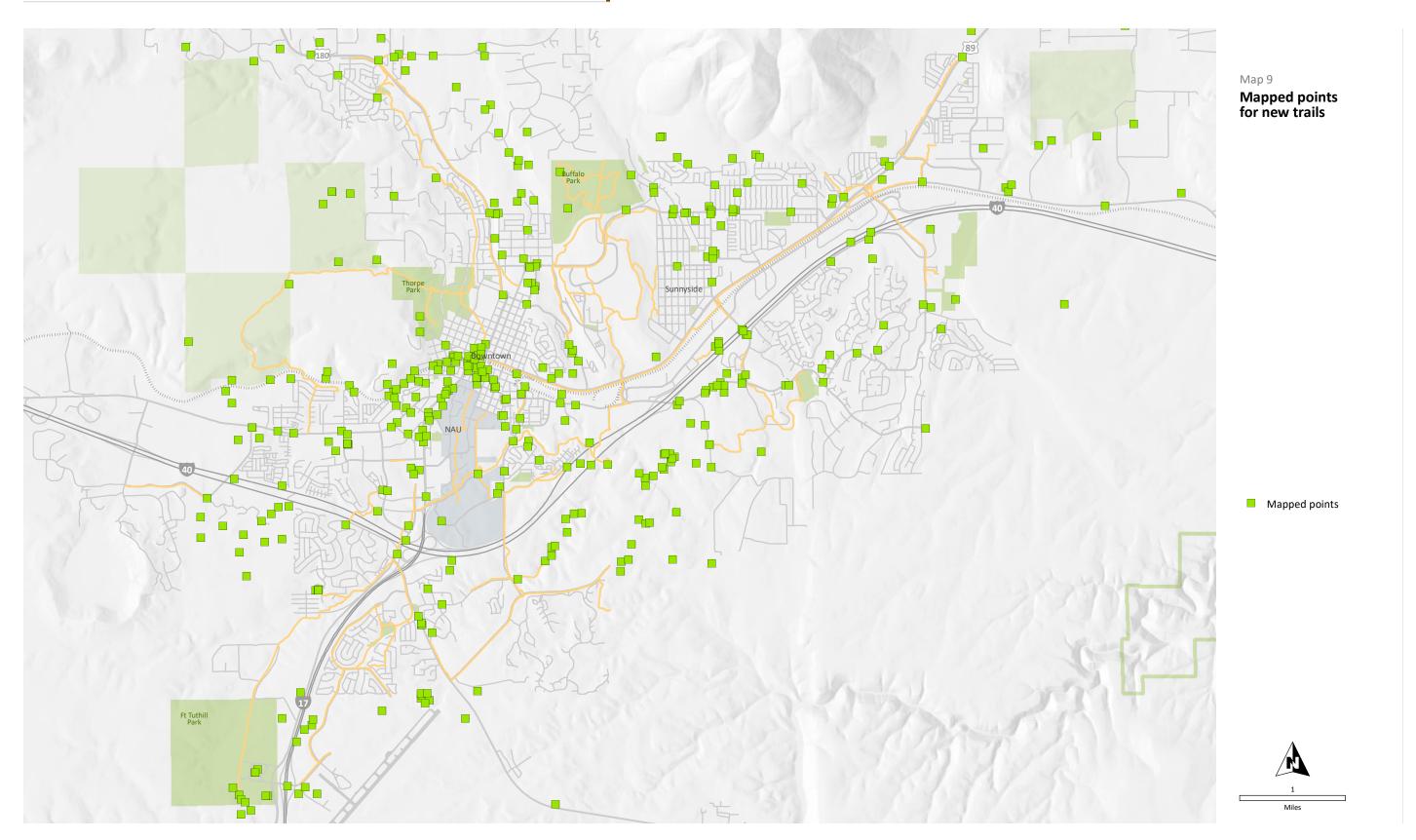
of a single-track experience and is not conducive to commuting.

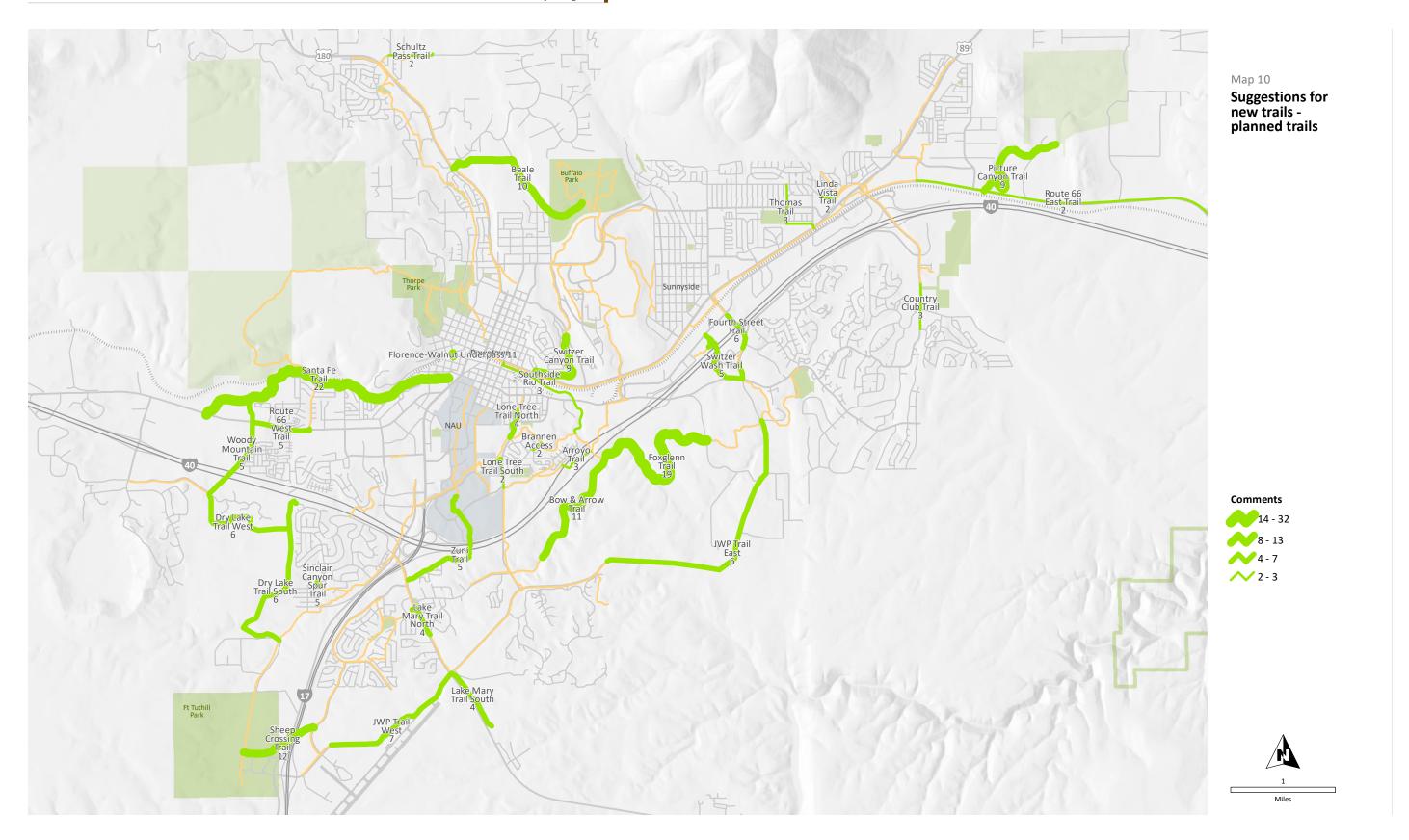
Eleven comments call for a trail connection to Fort Valley. There are two possible routes for this connection; one follows Fort Valley Road out from the Cheshire neighborhood, and the other cuts across Observatory Mesa in the vicinity of A1 Mountain.

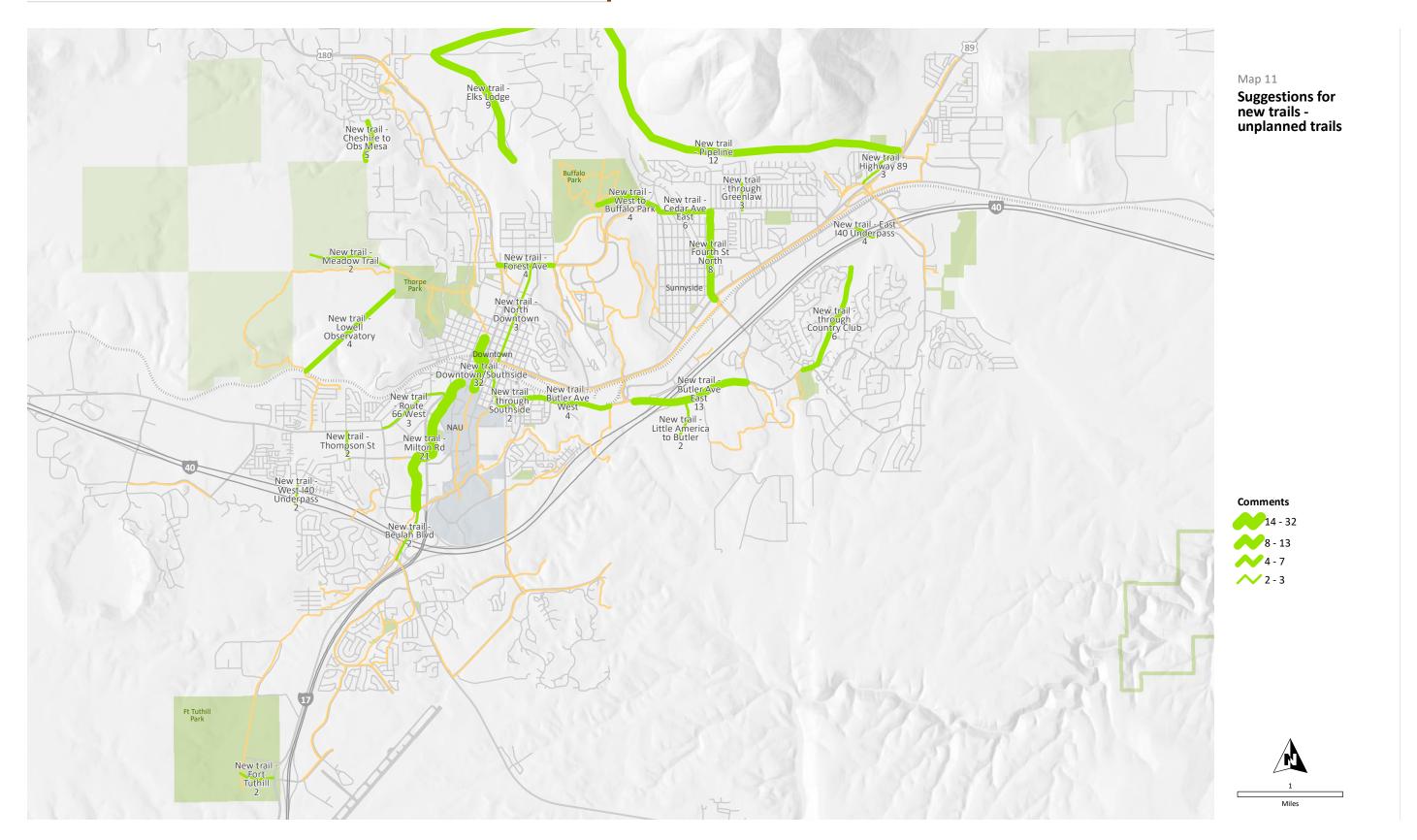
Table 32  New trails to outlying communities		
Community	Number	Percent
Kachina Village	13	35.1
Fort Valley	11	29.7
Doney Park	8	21.6
Mountainaire	3	8.1
Bellemont	2	5.4
Total	37	100.0

Eight respondents expressed a desire for a trail connection from Flagstaff to Doney Park. There are also two options for this connection; the first parallels Highway 89, and the second uses the planned alignment of the Picture Canyon FUTS Trail adjacent to the Rio de Flag.

Potential trail connections to outlying communities are generally located outside of City limits, so cooperation between the City and County may be necessary to finance and construct these trails







# Appendix A | Survey form

### **FUTS Trail Users Survey**

Survey of FUTS trail users, to collect information about who uses the trails, how they use them, what their perceptions of the trails are, and how they can be improved.

#### Introduction







This survey is intended to collect information from trail users about the Flagstaff Urban Trails System (FUTS), which is a city-wide network of non-motorized, shared-use paths that are used for both transportation and recreation. This information will assist the City of Flagstaff in enhancing existing trails and planning future trails.

This survey is specifically about FUTS trails, which are typically 8 to 10 feet in width, paved or aggregate-surfaced, and located within city limits. The survey not intended to include single-track trails, which are typically 1 to 2 feet in width and typically located in the National Forest outside of city limits.

This survey should take about 10 to 15 minutes to complete.







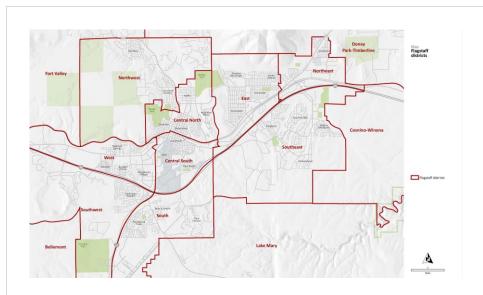
## About you

First, we would like to collect a little Information about who you are. The answers to these first questions will not appear with your response on the public facing page, even if you choose to show your name with your responses.

#### What is your home ZIP code

#### In which part of Flagstaff do you live?

- O Central North
- O Central South
- O East
- O Northeast
- O Northwest
- O South
- O Southeast
- O Southwest
- O West
- O Bellemont
- O Cosnino Winona
- O Doney Park-Timberline
- O Fort Valley
- O Kachina Village Mountainaire
- O Lake Mary
- O Outside Flagstaff region



## What is your age?

Number between 1 and 99

## What is your gender?

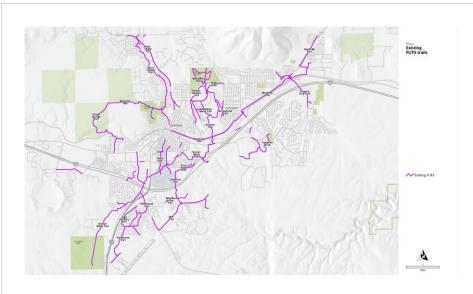
- O Female
- O Male

# Trail use

If you use the FUTS for commuting or transportation, what percentage of your total commute mileage is on FUTS trails?

- O Less than 25 percent
- O 25 to 50 percent
- O 50 to 75 percent
- O More than 75 percent

How do you typically get to the FUTS? (check all that apply)
☐ Drive ☐ Bicycle ☐ Walk or run ☐ Public transit- bus ☐ Other Enter other text here
When do you use FUTS trails? (check all that apply)
<ul><li>☐ Weekdays</li><li>☐ Weekends</li></ul>
What time of day do you generally use the FUTS? (check all that apply)
<ul><li>☐ Mornings</li><li>☐ Afternoons</li><li>☐ Evenings</li><li>☐ Nighttime</li></ul>
What time of year do you generally use the FUTS? (check all that apply)
☐ Spring ☐ Summer ☐ Fall ☐ Winter
Click this link to open a PDF map of existing FUTS trails



# Which FUTS trails do you typically use? (check all that apply) A link to a map of trails is provided below

- ☐ Arizona Trail☐ Arrowhead T
- ☐ Arrowhead Trail/Sego Lily Trail
- ☐ Arroyo Trail/Pine Knoll Trail
- ☐ Bow & Arrow Trail
- ☐ Cedar Trail
- ☐ Country Club Trail
- ☐ Fort Valley Trail
- ☐ Foxglenn Trail
- ☐ High Country Trail
- ☐ JWP Trail
- ☐ Karen Cooper Trail
- ☐ Lone Tree Trail
- Mars Hill Trail
- ☐ McMillan Mesa Trail
- ☐ Nate Avery Trail
- NAU Trail
- ☐ North 89 Trail
- ☐ Ponderosa Trail
- ☐ Route 66 Trail
- ☐ Sinclair Wash Trail
- ☐ Switzer Canyon Trail
- ☐ Tunnel Springs Trail

••	
rail p	perceptions
ainter	nance
your	opinion, MAINTENANCE of FUTS trails is
0	Excellent
	Good
0	
O	Poor
mme	nts/problem areas for maintenance:
ıfety a	and Security
	opinion, SAFETY and SECURITY of FUTS trails is
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent  Good
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent  Good  Fair
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent  Good
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent Good Fair Poor
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent  Good  Fair
your	opinion, SAFETY and SECURITY of FUTS trails is  Excellent Good Fair Poor

Cleanliness
In your opinion, CLEANLINESS of FUTS trails is
O Excellent
O Good
O Fair
O Poor
Comments/problem areas for cleanliness:
Mark a map in 3 steps
This question allows you to place points on a map to show (A) where you would like to see new FUTS trails built, and (B) where improvements and enhancements to existing trails are needed.
1 Select a place type
O NEW - New FUTS trails
O IMP - Improvements and enhancements
2 Click where you would like to place the pin
3 Repeat steps 1 and 2 as many times as you want
To see where future FUTS trails are planned per the Flagstaff Regional Plan, click on this link to open a PDF map of existing and planned FUTS trails

/hat do you l	like about the FUTS?	
·		
ther comme	nts?	
nank vou for	sharing your thoughts!	
,		